



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,639	12/19/2001	Anthony Patrick Mauro II	020151	5037
23696	7590	10/05/2005	EXAMINER	
Qualcomm, NC 5775 Morehouse Drive San Diego, CA 92121			DERWICH, KRISTIN M	
			ART UNIT	PAPER NUMBER
			2132	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

h

## Office Action Summary

Application No.

10/029,639

Applicant(s)

MAURO ET AL.

Examiner

Kristin Derwich

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-11 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Claims 2-11 are pending. Claim 1 is cancelled.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. Claims 3 and 4 recite the limitation "The apparatus" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 2's limitation is a communications device, not apparatus.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2, 5, 6 and 9 rejected under 35 U.S.C. 102(b) as being anticipated by Spaanderman et al. (Spaanderman), U.S. Patent No. 5,325,434.

As per claim 2:

Spaanderman discloses a communication device for fast generation of a cryptographic key, comprising:

Art Unit: 2132

a memory for storing said cryptographic key (8:3-18, wherein, if a key is being generated to be used for a subsequent time then the key must be stored in memory); and

a processor for generating said cryptographic key, said cryptographic key generated upon termination of a wireless communication and stored in said memory, wherein said cryptographic key is used for encrypting a subsequent communication by said wireless communication device (8:3-18).

As per claims 5 and 9, these are method and device versions respectively, of the claimed device discussed above in claim 1 wherein all claimed limitations have also been addressed and/or cited as set forth above.

As per claim 6:

Spaanderman discloses a method further comprising:

determining whether said cryptographic key has been previously stored (fig. 1, box 6, 5:22-28, wherein the method determines whether or not a key has been previously stored since the initial instantaneous key values are not based off of the previous key values); and

using said cryptographic key in a subsequent wireless communication to encrypt said subsequent wireless communication if said cryptographic key has been previously stored (fig. 1, box 6 and 7, 5:35-44, wherein if a previous key value exists then it is utilized to calculate the subsequent key value); and

generating a second cryptographic key and using said cryptographic key in a subsequent wireless communication to encrypt said subsequent wireless

Art Unit: 2132

communication if said cryptographic key has not been previously stored (5:22-44, wherein if a previous key value is not stored then instantaneous key values are derived).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4, 7-8 and 10-11 rejected under 35 U.S.C. 103(a) as being unpatentable over Spaaderman as applied to claims 1, 5 and 9 above, and further in view of Servi, U.S. Patent No. 5,319,711.

As per claims 3-4, 7-8 and 10-11:

Spaaderman fails to teach the cryptographic keys comprising a public or private key. However, Servi discloses the use of public key cryptography in a wireless communication system (1:42-49).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize public key cryptography in the wireless communications device because it makes it more secure as stated by Servi (1:42-49).

### ***Conclusion***

Art Unit: 2132

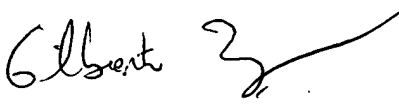
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin Derwich whose telephone number is 571-272-7958. The examiner can normally be reached on Monday - Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristin Derwich  
Examiner  
Art Unit 2132

  
KMD

  
GILBERTO BARRON JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100